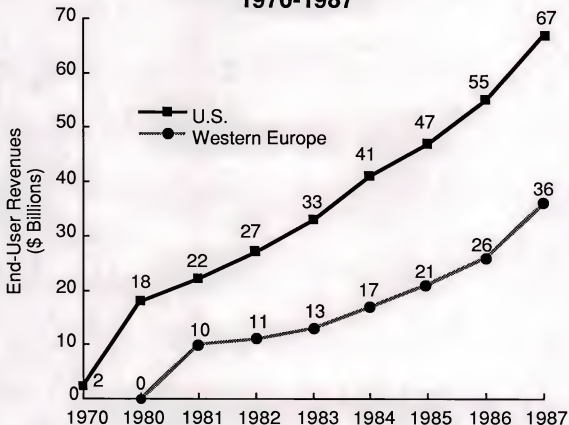


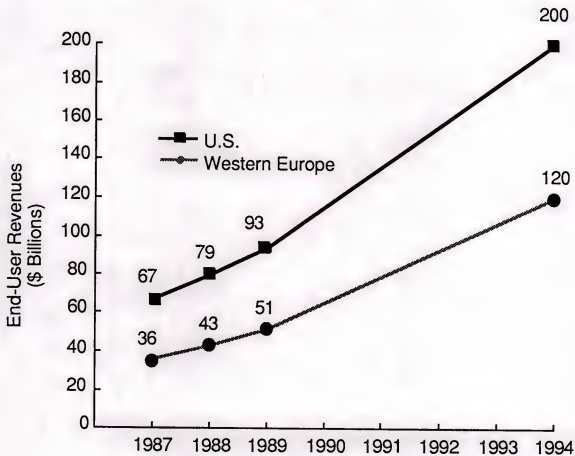
GROWTH IN THE SOFTWARE SERVICES INDUSTRY 1970-1987



Note: Definition changes and dollar exchange rate differences (notably between 1986 and 1987) have slightly affected gross market sizes on a year to year basis.

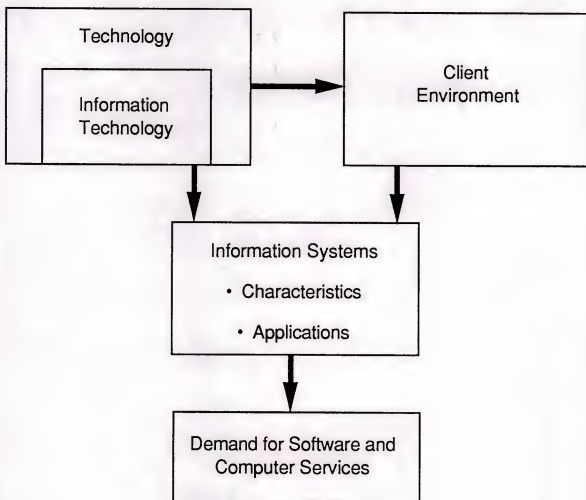


**FORECAST GROWTH IN THE
SOFTWARE AND SERVICES INDUSTRY
1989-1994**



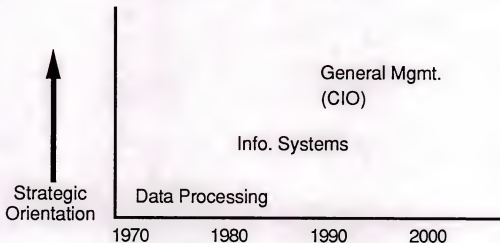


MARKET DRIVING FORCES

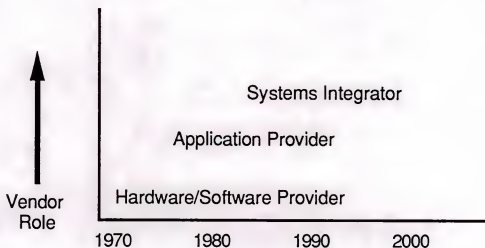




ORIENTATION OF THE RESPONSIBILITY

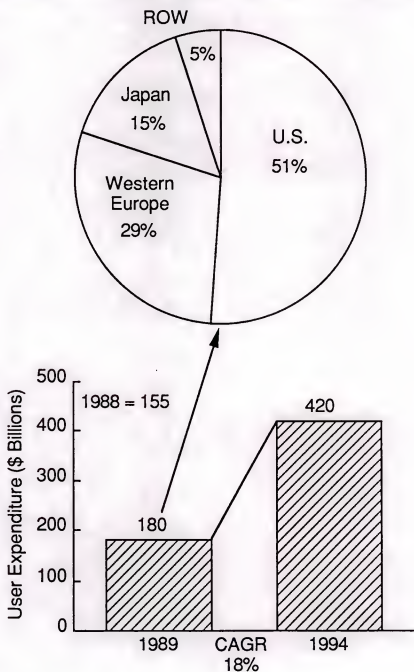


ROLE OF THE IS VENDOR



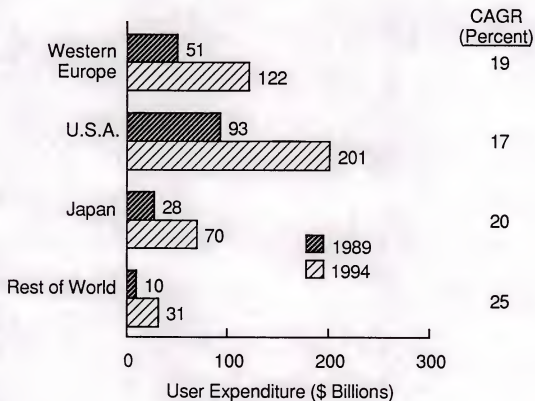


WORLD SOFTWARE AND SERVICES MARKET



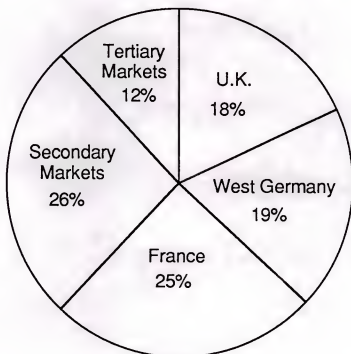


WORLD SOFTWARE AND SERVICES MARKET BY MAJOR GEOGRAPHIC REGION 1989-1994





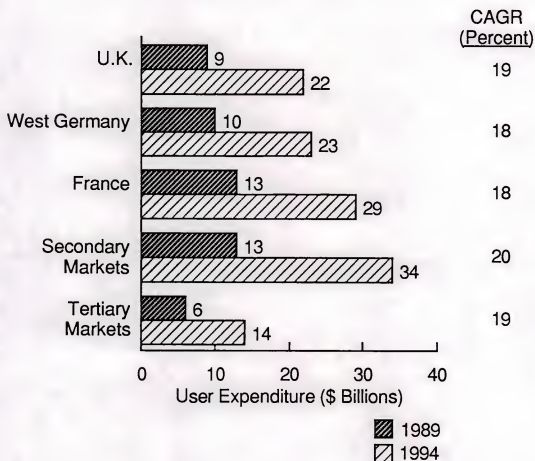
WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET



1989 \$51 Billion
(1988 \$43 Billion)

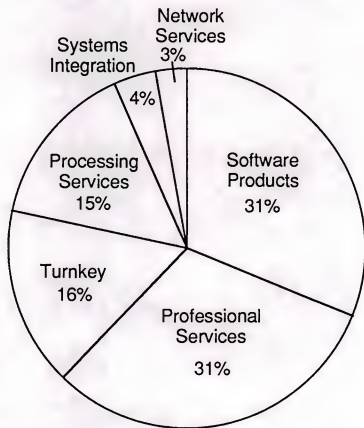


WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET BY MAJOR GEOGRAPHIC REGION, 1989-1994





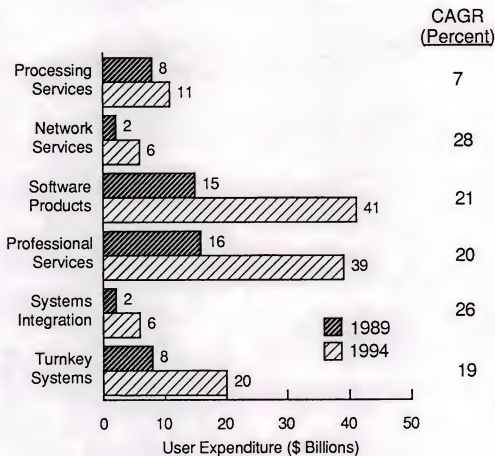
WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET



1989 \$51 Billion
(1988 \$43 Billion)



WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET BY MARKET SECTOR, 1989-1994





NETWORK SERVICES

Electronic
Information
Services

Network
Applications

Enhances
Services (VANs)

Network Management

Bearer
Services



COMPARATIVE MARKET SIZE W.E. AND U.S.

Market Size (\$ Billions)	20	50	80	110
W.E.	1984	1989	1992	1994
U.S.	1981	1986	1988	1990

(First year market size exceeded.)



WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET LEADING VENDORS

Rank	1979	Percent	1987	Percent
1	IBM	6.3	IBM	8.3
2	GSI	2.3	Nixdorf	3.0
3	ICL	1.8	Unisys	2.0
4	GEIS	1.5	CGS	1.5
5	CGS	1.4	Siemens	1.5
6	CICI	1.3	Digital	1.3
7	SEMA	1.3	Finsiel	1.2
8	SCICON	1.2	Reuters	1.1
9	SG2	1.2	Transpac	1.0
10	CDC	1.1	Olivetti	0.9
Total		19.4		21.8



INFORMATION SERVICES LEADING VENDORS

Vendors	1988 U.S. Revenues (\$B)*	Market Share (Percent)
IBM	5.7	7
EDS	1.7	2
ADP	1.6	2
DEC	1.3	2
Unisys	1.2	2
CSC	1.0	1
Arthur Andersen	1.0	1
McDonnell Douglas	0.9	1
CDC	0.9	1
Computer Associates	0.7	1

Top Ten Vendors = 20% of Industry Total

* INPUT Estimates



INFORMATION SERVICES LEADING VENDORS

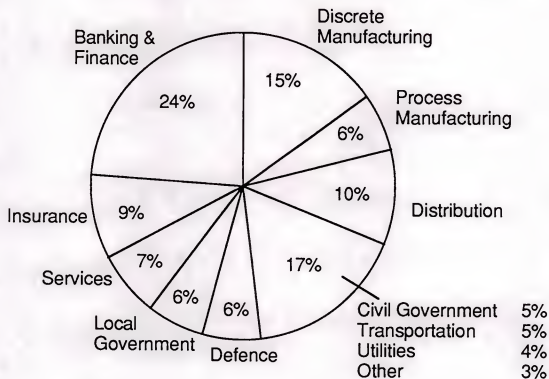
Vendors	1982 U.S. Revenues (\$B)*	Market Share (Percent)
IBM	1.24	4.7
CDC	0.8	2.9
ADP	0.6	2.4
CSC	0.6	2.2
EDS	0.5	2.0
GEIS	0.5	1.9
Burroughs	0.3	1.2
McDonnell Douglas	0.3	1.2
Arthur Andersen	0.2	0.8
Computervision	0.2	0.8

Top Ten Vendors = 20.1% of Industry Total

* INPUT Estimates



WORLD SOFTWARE AND SERVICES MARKET



1989 \$51 Billion
(1988 \$43 Billion)



MARKET OPPORTUNITY MATRIX

	Good	Medium	Poor
Geography			
Service Mode			
Industry Sector			

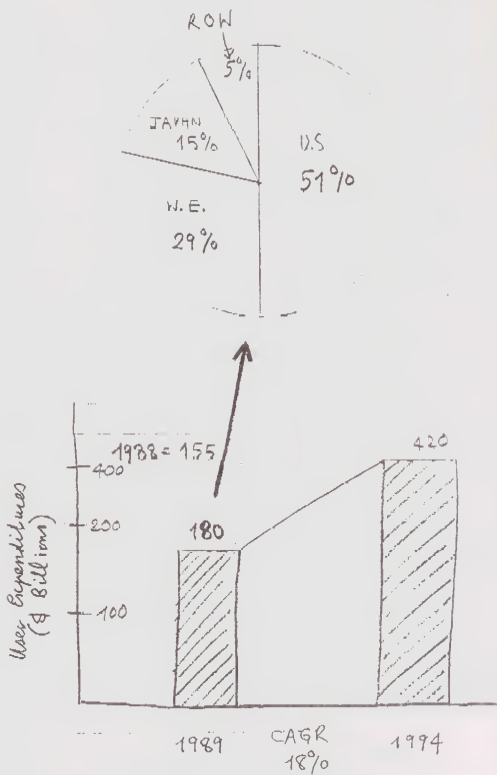


WESTERN EUROPEAN MARKET ANALYSIS

Market Sector	Sector Share (Percent)	CAGR 1989-1994	Leading Vendors
Processing Services	15	7	IBM, DATEV, GEIS
Network Services	3	28	REUTERS, IBM, GEIS
Software Products	31	21	(INDEPENDENTS) CA, MICROSOFT, SOFTWARE AG, SAP
Professional Services	31	20	IBM, CGS, FINSIEL, VOLMAC
Systems Integration	4	26	IBM, CGS, ANDERSEN
Turnkey Systems	16	19	NIXDORF, KIENZLE, PRIME



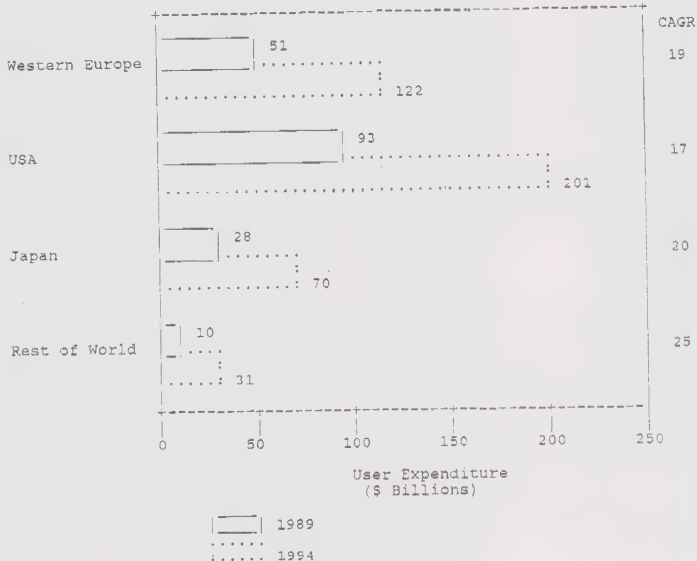
WORLD SOFTWARE AND SERVICES MARKET



1st draft

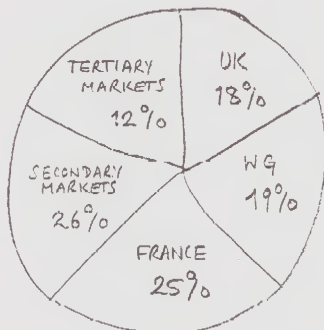


WORLD SOFTWARE AND SERVICES MARKET
BY MAJOR GEOGRAPHIC REGION, 1989 - 1994





WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET



1989 \$51 Billion }
(1988 \$43 Billion)



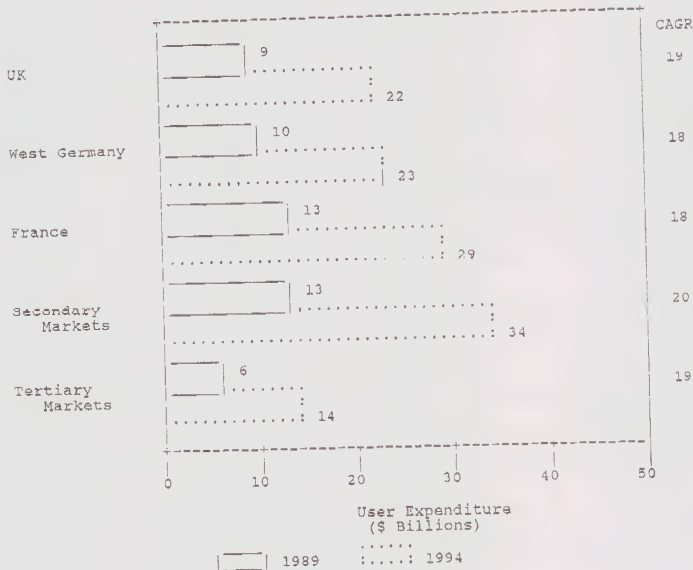
FROM INPUT LTD

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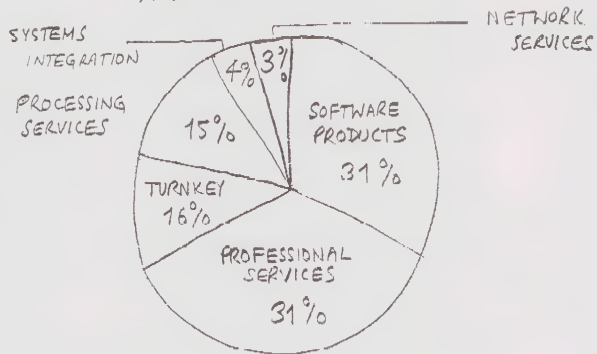
47

WESTERN EUROPE SOFTWARE AND SERVICES MARKET
BY MAJOR GEOGRAPHIC REGION, 1989 - 1994





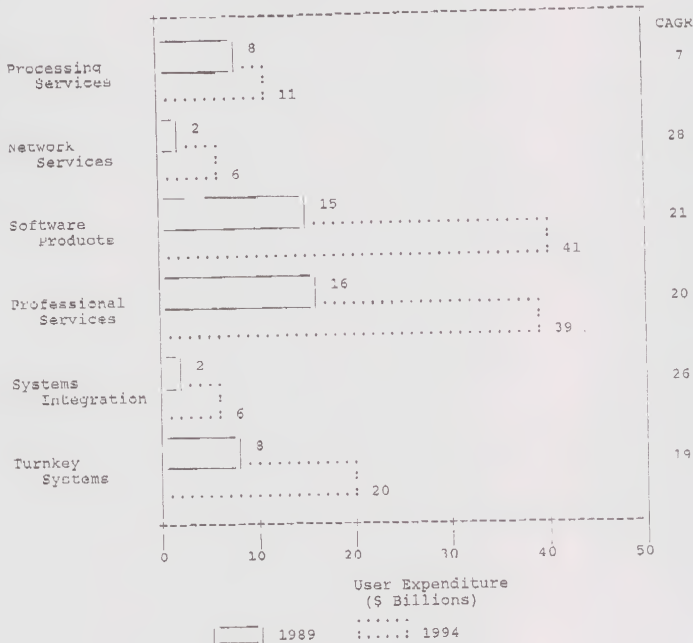
WESTERN EUROPE SOFTWARE AND SERVICES MARKET



1989 \$51 BILLION
(1988 \$43 BILLION)



WESTERN EUROPE SOFTWARE AND SERVICES MARKET
BY MARKET SECTOR, 1989 - 1994





#1

The Western E

Ind Services: 1988-1993

INPUT

D

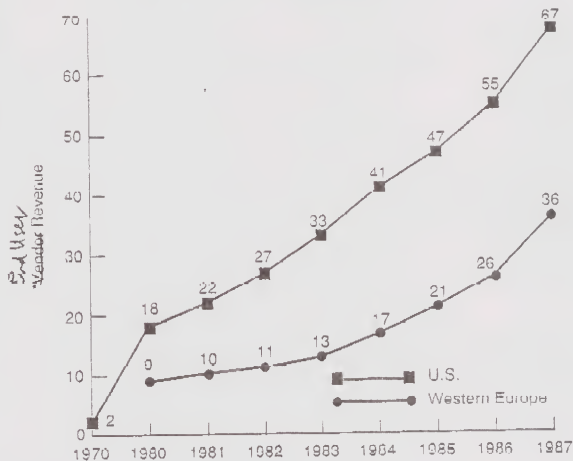
Comparison with the
United States Market

Exhibits III-19 and III-20 illustrate comparisons between the U.S. market and the European market both in terms of a historical trend and as forecast growth. Exhibit III-20 also illustrates the comparison between the U.S. and Europe by market sector.

EXHIBIT III-19

REVENUE GROWTH IN THE SOFTWARE SERVICES INDUSTRY, 1970-1987

(\$ Billions)

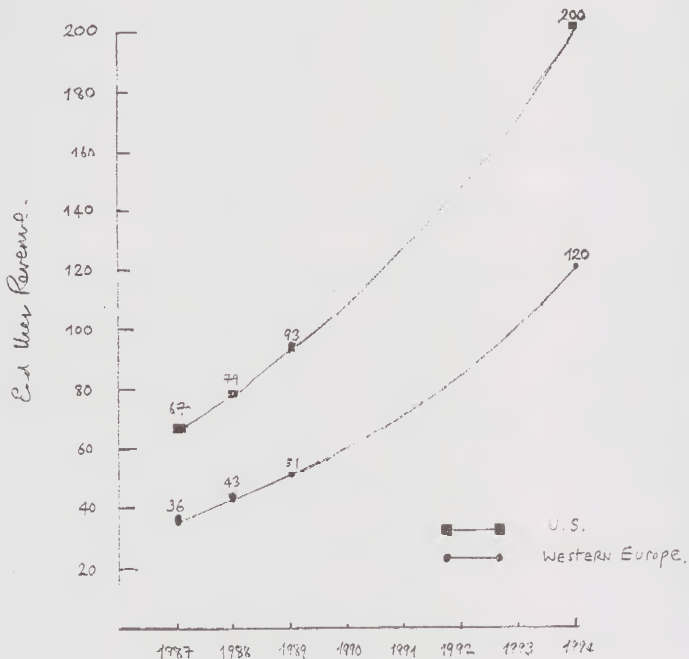


*Note: Definition changes and dollar exchange rate differences (notably between 1986 and 1987) have slightly affected gross market sizes on a year-to-year basis.



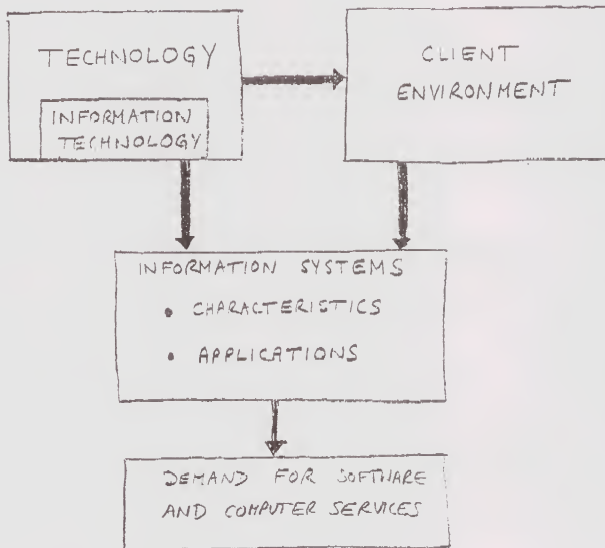
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FORECAST GROWTH IN THE SOFTWARE AND SERVICES INDUSTRY, 1987-1994 (\$ Billions)



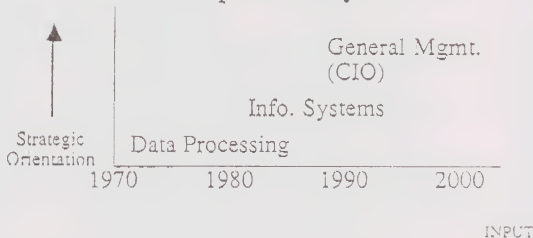


MARKET DRIVING FORCES

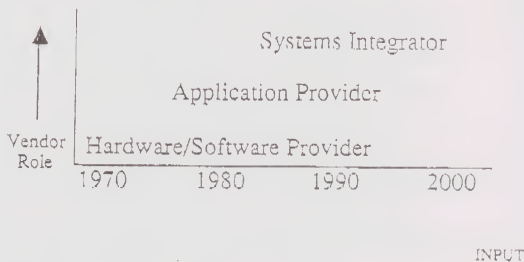




Orientation of the Responsibility



Role of the IS Vendor





MARKET OPPORTUNITY MATRIX

	GOOD	MEDIUM	POOR
GEOGRAPHY			
SERVICE MODE			
INDUSTRY/ SECTOR			



WESTERN EUROPEAN MARKET ANALYSIS

MARKET SECTOR	SECTOR SHARE %	CAGR 1989 - 94	LEADING VENDORS
PROCESSING SERVICES	15	7	IBM, DATEV, GEIS
NETWORK SERVICES	3	23	REUTERS, IBM, GEIS
SOFTWARE PRODUCTS	31	21	(INDEPENDENTS) CA, MICROSOFT, SOFTWARE AG, SAP
PROFESSIONAL SERVICES	31	20	IBM, CGS, FINISIEL, VOLMAC
SYSTEMS INTEGRATION	4	26	IBM, CGS, ANDERSEN
TURNKEY SYSTEMS	16	19	NIKDORF, KIENZLE, PRIME



COMPARATIVE MARKET SIZE

W.E. AND US

MARKET SIZE \$ B	20	50	80	110
WE	1984	1989	1992	1994
US	1981	1986	1988	1990

(First Year Market Size recorded.)



WESTERN EUROPEAN SOFTWARE AND SERVICES MARKET — LEADING VENDORS

RANK	1979	%	1987	%
1	IBM	6.3	IBM	8.9
2	GSI	2.3	NIXDORF	3.0
3	ICL	1.8	UNISYS	2.0
4	GEIS	1.5	CGS	1.5
5	CGS	1.4	SIEMENS	1.5
6	CISI	1.3	DIGITAL	1.3
7	SEMA	1.3	FINSIEL	1.2
8	SCICON	1.2	REUTERS	1.1
9	SG2	1.2	TRANSAC	1.0
10	CDC	1.1	OLIVETTI	0.9
TOTAL		19.4		21.8



Information Services Leading Vendors

Vendors	1988 U.S. Revenues (\$B)*	Market Share (Percent)
IBM	5.7	7
** EDS	1.7	2
ADP	1.6	2
DEC	1.3	2
Unisys	1.2	2
CSC	1.0	1
Arthur Andersen	1.0	1
McDonnell Douglas	0.9	1
CDC	0.9	1
Computer Associates	0.7	1

Top Ten Vendors=20% of Industry Total

* INPUT Estimates

INPUT

NOTES:

MPRE89-57 + 58



INFORMATION SERVICES LEADING VENDORS

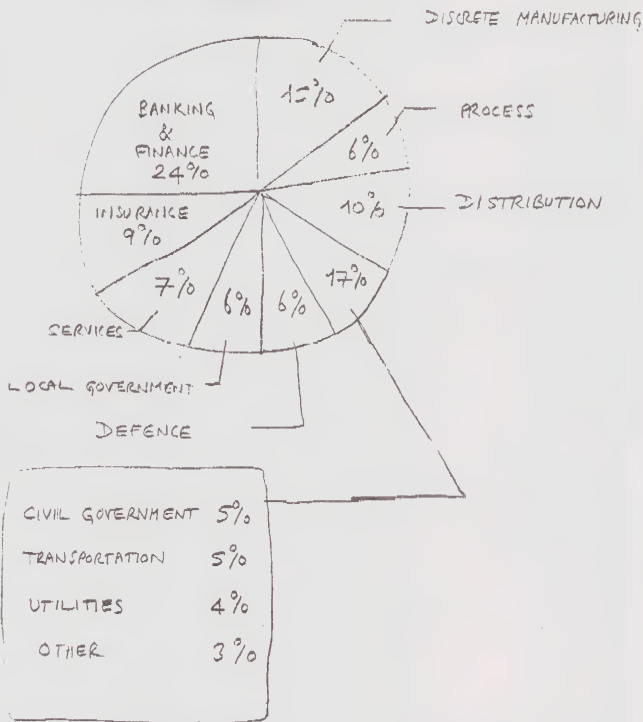
VENDORS	1982 US REVENUES (\$ B)	Market Share (Percent)
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CDC	0.8	2.9
ADP	0.6	2.4
CSC	0.6	2.2
EDS	0.5	2.0
GEIS	0.5	1.9
BURROUGHS	0.3	1.2
McD Doug	0.3	1.2
Ashlar And	0.2	0.8
Compuvision	0.2	0.8

Top Ten Vendors = 20.1 % of Industry Total.



#10

WESTERN EUROPE SOFTWARE AND SERVICES MARKET



1989 \$51 BILLION
(1988 \$43 BILLION)

NETWORK SERVICES

ELECTRONIC
INFORMATION
SERVICES

NETWORK
APPLICATIONS

ENHANCED
SERVICES (VAND)

NETWORK MANAGEMENT

BEARER
SERVICES

